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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/468,538 12/21/99 SAKAI

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IM22/0412
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EXAMINER

WALKE, A

ART UNIT

PAPER NUMBER

1752

DATE MAILED:

04/12/00 *2*

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/468538

Applicant(s)

Sakai et al

Examiner

A. Wallace

Group Art Unit

1752

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 12/21/99
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-20 is/are pending in the application.
Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-20 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____
 - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

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DETAILED ACTION

1. Claims 4 and 7^{prt} are objected to because of the following informalities: Although claim 4 is claiming formulas II and III, both formulas were labeled III. For purposes of examination it was assumed that the first formula listed in the claim was formula II and the second was formula III. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Depend 3. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al (5,747,232) in view of Sakai (5,573,898).

Anderson et al disclose a silver halide photographic material suitable for a motion picture film comprising a support having coated thereon (in order) a non-coloring light-insensitive electrically conductive subbing layer, a photographic emulsion, and a protective overcoat. The material preferably contains an antihalation layer containing carbon black. The reference teaches that motion picture films are photographic films used as origination films and intermediate films (such as camera and print films) that contain a carbon black -containing layer on the backside of

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the film (column 1, lines 17-34). The support is preferably a polymeric support (column 4, lines 5-20). The color photographic material of the reference preferably contains a dye-image forming layer unit sensitive to each of the three primary regions of the spectrum. The layer units may have one or more layers and usually comprise red, green and blue light sensitive emulsion layer units containing cyan, magenta, and yellow dye-forming couplers respectively. The silver halide grains of the reference may be silver bromide, chloride, bromiodide, chlorobromide, chloriodide, or chlorobromiodide (column 6, lines 38-45). In addition to the dye-imge forming layers auxilliary layers such as overcoat layers, filter layers, interlayers, and antihalation layers may be present (column 6, lines 9-37).

Sakai teaches the use a pyrrolotriazole coupler, specifically a cyan coupler, which is of structure similar to the present formula (1) in a color photographic material. These couplers are known to provide excellent color hue (column 2, lines 5-10). Position X of the reference formula (Ib) is any group capable of splitting off from the compound by the coupling reaction with an oxidation product of an aromatic primary amine color developing agent (see column 15). Position X of the formula (Ib) of the reference is the position in the present formula (1) where the $-O_2C-X$ substituent resides. Exemplified coupler 41 contains a $-O_2C-X$ substituent in the present position X, which in the reference is a group which links the nitrogen of a nitrogen - containing heterocyclic group to the coupling position. The reference exemplifies substituents in the present positions R1 and R2 which meet the present limitations for the σp value (see couplers 9, 14, 31, 35, 36, and 39-42). The grains of the reference are preferably high silver chloride grains having a

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chloride content of 98-100 mol % (column 61, line 56- column 62, line 19). heterocyclic group to the coupling position. Sakai teaches that pyrazoloazole couplers are better than phenol or naphthol couplers because there is less unfavorable absorption of the dyes formed by the pyrazoloazole couplers than by those formed by the conventional cyan couplers (column 1, line 16 - column 2, line 11).

Anderson et al teaches that the layers of the material and their ingredients are those well known in the art (column 6, lines 15-37), therefore it would have been obvious to one of ordinary skill in the art to prepare the motion picture film of Anderson et al choosing to use the cyan dye-forming couplers of Sakai with reasonable expectation of achieving a film protected from the generation of static charge after the carbon black-containing layer is removed.

11 - Pl now from 28 (100% in view)
24

21 must be rejected (1+3) 22

4. Claims ³3, 4, 6-8, ¹⁰10, 12-17, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over in view of Fujita et al (5,273,866) in view of Sakai.

Sakai has been discussed above.

Fujita et al disclose a silver halide photographic material comprising a support having coated thereon at least one blue, green, and red emulsion layer, and one or more hydrophilic

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colloid layers containing a dispersion of microcrystals of at least one compound represented by formulas I-VI which results in improved sharpness and preservability. Dyes I-IV are of structure similar to the present formulas I-III, IV, and XI. These dyes are incorporated as a dispersion of finely divided solid into a layer of the emulsion such as a hydrophilic colloid layer to be coated onto a photographic element. The photographic material of example 1 comprises a support having coated thereon a non-coloring light-insensitive antihalation layer between the support and the light sensitive emulsion layer (column 59). The material may be used for motion pictures (column 54, lines 11-16). The dispersion can be prepared by precipitating a dye in the form of a dispersion and/ or by subjecting a dye to fine grinding by a known means such as ball mill in the presence of a dispersant or dissolve the dye in a solvent optionally adding a surface active agent. The dye grains should have a mean diameter of 10 micrometers or less but preferably 0.5 micrometers or less (column 35 lines 37-68). This overlaps with the range in the present claims 6 and 19. The dye appears to be added in an amount meeting the limitations of the present claim 8 (column 36, lines 38-41). These dyes may partially or completely replace colloidal silver usually present in filter or antihalation layers. The pH of the materials in the examples of the reference is 6.2 which is within the scope of the present claim limitations.

The optical density of a photographic material is a functional limitation. It is the position of the examiner that since the material of Fujita et al in view of Sakai meets the physical limitations of the present claim 10, the material would inherently meet the limitation of claim 15 for the optical density of the material.

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Sakai teaches that pyrazoloazole couplers are better than phenol or naphthol couplers because there is less unfavorable absorption of the dyes formed by the pyrazoloazole couplers than by those formed by the conventional cyan couplers (column 1, line 16 - column 2, line 11), therefore it would have been obvious to one of ordinary skill in the art to prepare the motion picture film of Fujita et al in view of Sakai choosing to replace the phenol or naphthol couplers of Fujita et al with a pyrazoloazole coupler of Sakai to achieve improved color reproduction.

5. Claims 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al in view of Sakai and in further view of Swank et al (4,006,025).

M.P.E.P. § 2113:

“Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985)... “The Patent Office bears a lesser burden proof in making out a case of *prima facie* obviousness for product-by-process claims because of their peculiar nature” than when a product is claimed in the conventional fashion. *In re Fessman*, 180 USPQ 324, 326 (CCPA 1974). Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden

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shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289, 292 (Fed. Cir. 1983).

Sakai, and Fujita et al have been discussed above.

Swank et al disclose a method for preparing finely divided dispersions of dyes. The process includes heating an organic solvent to dissolve the dye then dispersing the dye droplets, possibly with the help of a surfactant, in a suitable binder. The method includes a heat treatment step in which the temperature is between 40 and 50° C (column 4, lines 17-36). Performing the milling step at an elevated temperature aides in dissolving the dye and results in a dispersion having finely divided dye crystals (column 2, lines 3-16).

Fujita et al states that the dispersion can be prepared by precipitating a dye in the form of a dispersion and/ or by subjecting a dye to fine grinding by a known means such as ball mill in the presence of a dispersant or dissolve the dye in a solvent optionally adding a surface active agent, therefore it would have been obvious to one of ordinary skill in the art to prepare the material of Anderson et al in view of Sakai and Fujita et al choosing to use the method of preparing a dye dispersion taught by Swank et al with reasonable expectation of achieving a film protected from the generation of static charge after the carbon black-containing layer is removed.

6. ¹⁰⁰Claims 5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al in view of Sakai and Fujita et al in further view of Mifune et al (4,713,321).

Anderson et al , Sakai, Fujita et al, and Swank et al have been discussed above.

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Mifune et al disclose examples of surface active agents which include alkylene oxide derivatives, and glycidol derivatives.

Fujita et al states that the dispersion can be prepared by precipitating a dye in the form of a dispersion and/ or by subjecting a dye to fine grinding by a known means such as ball mill in the presence of a dispersant or dissolve the dye in a solvent optionally adding a surface active agent, therefore it would have been obvious to one of ordinary skill in the art to prepare the material of Anderson et al in view of Sakai and Fujita et al choosing to use the a surface active agent such as polyalkylene oxide as taught by Mifune et al with reasonable expectation of achieving a film protected from the generation of static charge after the carbon black-containing layer is removed.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amanda Walke whose telephone number is (703) 305-0407. The examiner can normally be reached on Monday- Thursday from 6:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Baxter, can be reached on (703) 308-2303. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

ACW
acw

April 10, 2000


JANET BAXTER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700